

# 2015 TOWN OF WELLINGTON ANNUAL WATER QUALITY REPORT

# Esta es información importante. Si no la pueden leer, necesitan que alguien se la

We are pleased to present to you a synapses of the 2015 Water Quality Report. You can view this report in its' entirety at https://www.colorado.gov/cdphe/ccr. Click on "Draft Consumer Confidence Reports (Water Quality Report), scroll down to Wellington Town Of, click and open report. Public Water System Identification number CO-0135838

Our processes have produced a good quality drinking water throughout the Year of 2015. Any questions, comments or concerns may be directed to Mr. Mike Bean at (970) 690-0357 or Mr. James Creaghe at (970) 568-3021. The opportunity for public participation in decisions affecting Wellington's water, is available at Town Board meetings. The Town Board meets the second and fourth Tuesday of each month at 7:30 pm at the Leeper Center. Copies of this pamphlet are available at the Town Hall, 3735 Cleveland Ave., from 8:00 am to 5:00 pm Monday through Friday.

# Wellington's Water for the Calendar Year 2015

Wellington's water system met all Federal and State standards for monitoring and reporting in 2015. During the routine Synthetic Organic Compound Sampling (SOC) a result of 1.7 micro grams per liter was detected of a compound none as Dalapon, (a synthetic substance found in herbicides). As a result Dalapon was added to our Quarterly Sampling Schedule, as a report only. No other new sampling action is required for the year 2015.

The average turbidity, (an indicator of how well water has been filtered and or treated) was 0.02 NTU's in 2015. Our turbidity was continuously below the required 0.30 NTU's in 100% of samples. The average Hardness in 2015 was 225 mg/L and the average Alkalinity is around 90 mg/L. All other water treatment parameters were equal to or below Federal, State and Local Government required analytical results. Bacteriological sampling was also conducted monthly, throughout our distribution system, a total of 10 samples are taken per month, all bacteriological testing was negative.

The EPA completed a UCMR (Unregulated Contaminant Monitoring Rule) evaluation of the Distribution System two separate samples were analyzed , on two separate dates. The first sampling event took place August 05, 2013, the second November 04, 2013. During both sampling events the first sampling point (Common Header 009, a Fire hydrant, located at 3rd and Washington) and the second sample was taken at the WWTP Sample MAX RES1, (SP-6 Welington Wastewater Treatment Plant, Lab sink) for maximum residence time. Any result above the EPA established Minimum Reporting Levels (MRL) must be reported in the Consumer Confidence Report. An analytical result is not necessarily a health issue, depending on concentration and consumption quantities. A complete explanation of The UCMR Rule including all Contaminants can be viewed at .

http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/index.cfm. http://water.epa.gov/scitech/drinkingwater/dws/ccl/ccl3.cfm#chemical

### **UCMR3** Results

# 8/13-COMMON HEADER MAX RESIDANCE 1 Manganese = 0.003mg/L 0.0032mg/L Molybdenum = 0.0024mg/L 0.0019mg/L Strontium = 0.0039mg/L 0.0036mg/L Vanadium = 0.0016mg/L 0.0013mg/L Chlorate = 0.0018mg/L 0.0013mg/L

### 11/13- COMMON HEADER

### **MAX RESIDANCE 1**

Manganese	=	0.001 mg/L	_
Molybdenur	n =	<0.001mg/L	0.00351mg/L
Strontium	=	0.0088mg/L	0.00455mg/L
Vanadium	=	<0.002mg/L	0.000667mg/L
Chlorate	=	0.0012mg/L	0.00203mg/L

## UCMR3 Minimum Reporting Level (MRL)

 Manganese
 =
 0.001mg/L

 Molybdenum
 =
 0.001mg/L

 Strontium
 =
 0.0003mg/L

 Vanadium
 =
 0.0002mg/L

 Chlorate
 =
 0.020mg/L

# **Current Status of Wellington's Water Treatment System**

Water for the town of Wellington Customers was produced from 2 water sources and 3 different treatment systems: The North Poudre Irrigation Reservoir #3 and a ground-water well system. Together total production was: 282 million gallons in 2015. Approximately 123 million gallons was produced at the conventional treatment plant; 95 million gallons was produced at the same location through the Micro-filtration unit and 63 million gallons was produced from our well system through the Towns Nano-Filtration unit.

Reservoir # 3 is located on the west side of County Road 11 between County Roads 66 and 68 and is the source water for the Main Plant. This reservoir is a run off reservoir and as such the Raw water quality is at times slightly undesirable, however the Conventional and Micro–Filtration Plants always produce a beautiful quality drinking water.

Town-owned wells are used for raw water supplied to the Nano-Filtratoion unit, as well as for irrigation throughout the towns park and recreation areas.

The Town wells are located on the Coal Creek alluvial.

Well water is treated through the Nano-Filtration Unit producing an exceptionally high quality product., which is then blended into the distribution system.

The Micro and Nano Filtration units, both employ membrane filtration technology the difference between them is the particle size removed from the source water.

### **EXPLANATION OF CONTAMINANTS AND THEIR PRESENCE IN DRINKING WATER**

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants, call the EPA Safe Drinking Water Hotline at 1-800-426-4791 or: www.epa.gov/safewater

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- > Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- > Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, or mining and farming.
- > Pesticides and herbicides that may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- > Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff, and septic systems.
- > Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.
  In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the table on the back you may find terms and abbreviations you are not familiar with. In order to help you better understand these terms we have provided the following definitions:

Maximum contaminant level (MCL). - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum contaminant level goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Secondary maximum contaminant level (SMCL) - non-mandatory standards set forth merely as guidelines for water systems

Treatment technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Action level (AL) - The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity units is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Parts per million (ppm) - most common unit used in measuring the concentration of a contaminant in water. One milligram per liter of water (mg/l) is equal to one part per million.

Parts per billion (ppb) - Unit used in measuring low-level concentration of a contaminant in water. One microgram per liter of water (ug/l) is equal to one part per billion.

Running Annual Average (RAA) - Total Organic Carbon, Trihalomethane and Haloacetic acid compliance is determined using a running annual average

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Waiver - State permission not to test for a specific contaminant.

DBP- Disinfection Byproduct (organics plus chlorine)

TTHM- Total Trihalomethanes (an indicator DBP)

HAA- Haloacetic acids (an indicator DBP)

IDSE- Initial Distribution System Evaluation

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your homes plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. In addition you should flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791.

Some people who drink water containing Trihalomethanes or Haloacetic acids in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Nitrates in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

The State requires The Town of Wellington to monitor for certain contaminants less than once per year due to the fact that the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old. All other data is from January 1, 2015 to December 31, 2015 unless otherwise noted. The Town has waivers on testing for cyanide, asbestos.

Microbiological	MCL	MCLG	Level Detect- ed/Range	Unit	Meet the standard?	Sample Dates	Likely Sources
Contaminants		A = 7	eu/Range	A = -2	Standard?		
Total Coliform	One positive	0	Absent in 100% of	Absent or	Yes	Nine (9) Distribution	Naturally present in the environment.
Bacteria	monthly	1	samples	Present	1	Samplès Per Month in 2015	
	sample	1	·	1	1		l l
Turbidity	0.30 (TT)	N/A	0.02 Average	NTU	Yes	Continuous	Soil Runoff
	1 '	1	0.01-0.145 Range	1	1	Monitoring (2015)	l l
	1 '	1	'	1	1	'	
Lowest monthly	95%	100%	100%	Percentage	Yes	Continuous	l l
percent of turbidity read-	1 '	1	·	1	1	Monitoring (2015)	l l
ings above the TT limits.	1 '	1	·	1	1	'	
Radiological	MCL	MCLG	Level Detect-	Unit	Meet the	Sample Dates	Likely Sources
Gross Alpha	15	0	ed/Range 2	pCi/L	standard? Yes	2011	Eracion of natural denocite
Gross Alpna Combined Uranium	15 30	0	1	pCi/L pCi/L		2011 2011	Erosion of natural deposits
Combined Granium	30	U	' '	pC//L	Yes	2011	l 'I
Lead and Copper	MCL	MCLG	90th percentile value	e Unit	Meet the	Sample Dates	Likely Sources
			·		standard?	·	,
Lead	15 (AL)	0	0	ppb	Yes	07/2014 to 08/2014	Corrosion of household plumbing systems. Erosion of natural deposits.
Copper	1.3 (AL)	1.3	0.090	mg/L	Yes	07/2014 to 08/2014	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.
	1		<u> </u>	<u>'</u>	<b></b> '	l'	
Inorganic	MCL	MCLG	Level Detected	Unit	Meet the standard?	Sample Dates	Likely Sources
Contaminants							
Fluoride - 006T -Nano	4.0	4.0	0.11	mg/IL	Yes	08/13/2015	Erosion of natural deposits,;water additive which promotes strong teeth, Discharge from fertilizer and aluminum factories.
012 - Plant Finished	4.0	4.0	0.75	mg/L	Yes	08/13/2015	Runoff from fertilizer use; leaching from septic tanks, sewage;
Nitrates - 006T - Nano	10	10	3.4	mg/L	Yes	08/13/2015	TAUTOH HOTH TOTHIEZOF GOO, TOGOTHING HOTH COPIES CA
012 - Plant Finished	10	10	0.12	mg/L	Yes	08/13/2015	
Damilated		MOLO	Detected Aver	Linit	112-14-bo	O ente Datas	Libely Comment
Regulated	MCL	MCLG	Level Detected Average (Range)	- Unit	Meet the standard?	Sample Dates	Likely Sources
Organics Chlorite EP1 Plant	1.0	0.80	0.59 (0.36 - 0.951)	mg/L		Daily at entry point and one	By-product of micro-organism control
Distribution System	1.0	0.80	0.59 (0.36 - 0.951)	_	Yes	set of three quarterly in	by-product of filloro-organism control
Chlorine	4.0	4.0	, ,	mg/L mg/l		Distribution sites (2015)	Detailing water disinfection with chlorination (hacterialogical control)
Chionne	4.0	4.0	0.83 (0.31-1.54)	mg/L	Yes	Continuous at entry point and in Distribution (2015)	Drinking water disinfection with chlorination (bacteriological control)
Trihalomethanes	80	2/2	E0 26 (28 N _ 93 N)	pob/PAA)	Yes	Two/sites/quarterly (2015)	
Hillidionieuraries	ου	n/a	58.26 (28.0 - 93.0)	ppb(RAA)	Tes ,	Two/sites/quarterly (=5.5,	By-product of drinking water disinfection with chlorination
Unicacetic acide	60	2/2	20.00 (46.9 54.9)	b/DAA)	Vac	Two/sites/quarterly (2015)	Du product of distring water disinfection with chlorination
Haloacetic acids	60	n/a	30.09 (16.8 - 54.9)	ppb(RAA)	Yes	Two/sites/quarterly (2010)	By-product of drinking water disinfection with chlorination
Total Organic Carbon	Must be \$1.0	7/2	1.12	Damoval Patic	Yes	One/month (2015)	Not well a coursing in an irranment we use enhanced treatment to remove the required amount of
Total Organic Carbon	Must be >1.0	n/a	1.14	Removal Ratio	Tes ,	Olicinional (2010)	Naturally occurring in environment; we use enhanced treatment to remove the required amount of
1	1 '	1	·	1	1	'	natural organic material and have demonstrated compliance with alternative compliance criteria.
<u> </u>	1	1	·	1	1		Organics combined with chlorine
Larrandotad	CMCI	MOLO	Datast	Unit	11- of the	Serveda Daton	Liberty Courses
Unregulated	SMCL	MCLG	Level Detect- ed/Range	Unit	Meet the standard?	Sample Dates	Likely Sources
Contaminants Sodium	N/A	N/A	9.9	mg/L	Yes	08/13/2015	Naturally present in environment
Godiam	1	18/73	9.5	mg, L	163	00/10/2010	reaction of the control of the contr
Dalanon	N/A	N/A	1.7	ug/l	Yes	08/13/2015	Naturally present in environment
Dalapon	IN/A	IN/A	1.7	ug/L	162	06/13/2013	Naturally present in environment
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